

Abstract of the Disclosure

The method for manufacturing an FeRAM capacitor having an enhanced adhesive property between a dielectric layer and a bottom electrode and a grain uniformity of the dielectric layer, is employed by forming hillocks on the bottom electrode purposefully before formation of the dielectric layer. The method includes steps of: preparing an active matrix obtained by predetermined processes; forming a first bottom electrode on the active matrix; forming a third ILD on exposed surfaces of the first bottom electrode and the second ILD; planarizing the third ILD till a top face of the first bottom electrode is exposed; forming a second bottom electrode on a top face of the bottom electrode; carrying out a first annealing process for deforming a surface of the second bottom electrode; forming a dielectric layer on exposed surfaces of the first bottom electrodes, the second bottom electrode and the third ILD; carrying out a second annealing process; and forming a top electrode on the dielectric layer.